

FIG. 1A

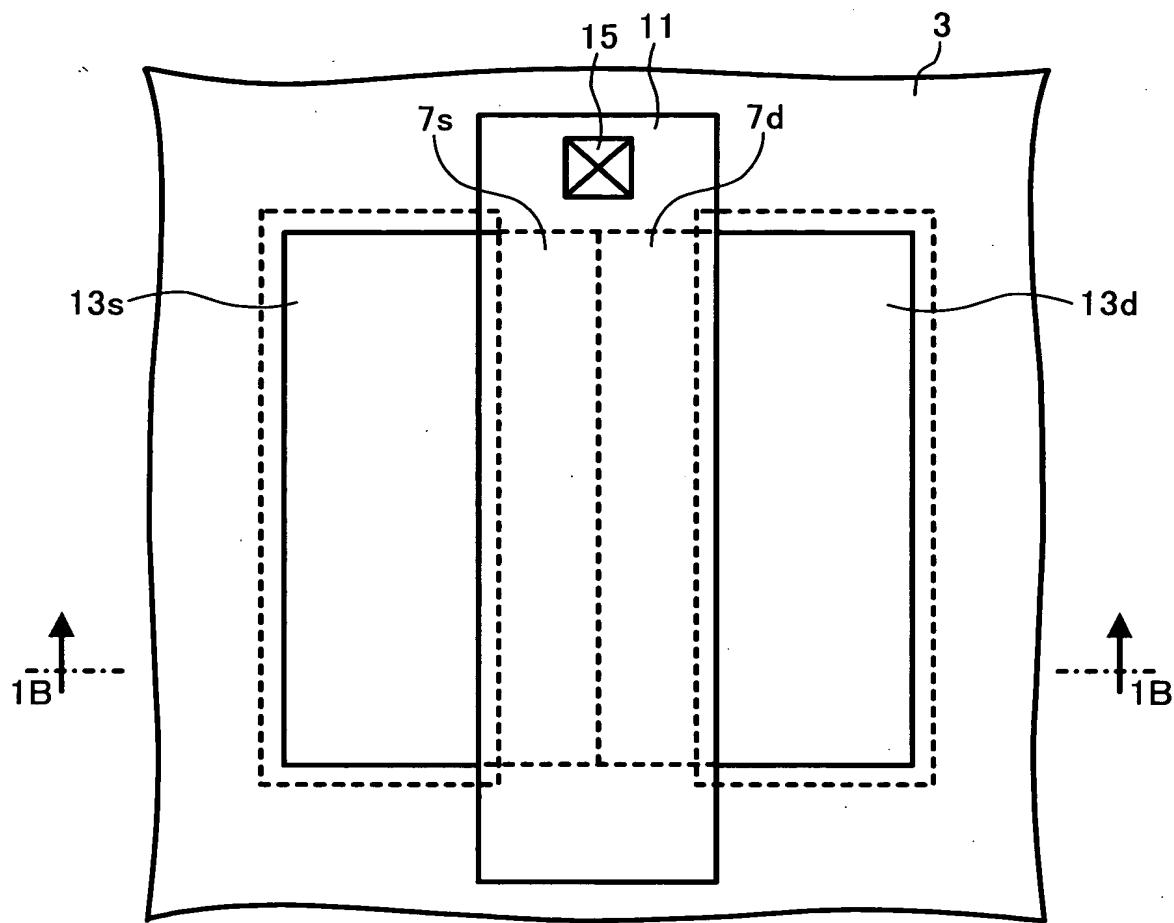


FIG. 1B

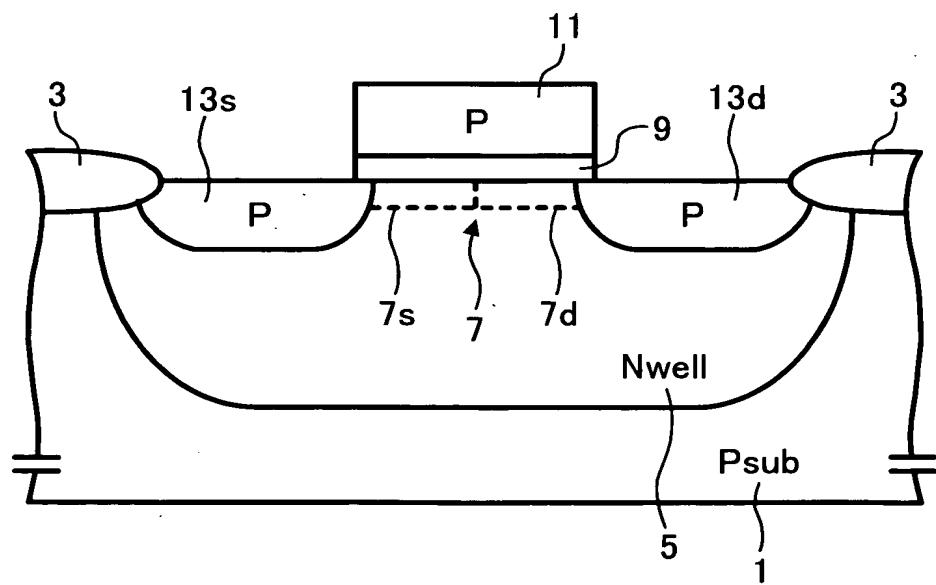


FIG. 2

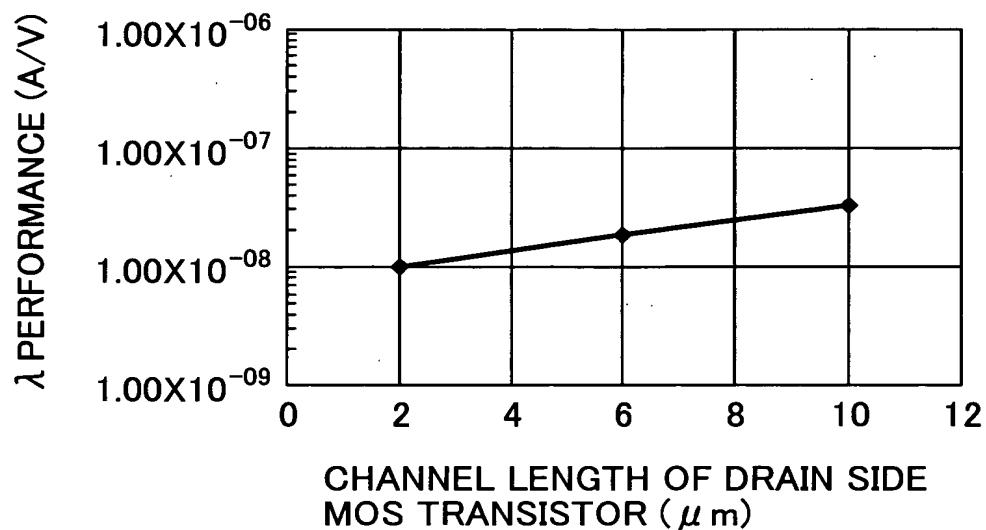


FIG. 3

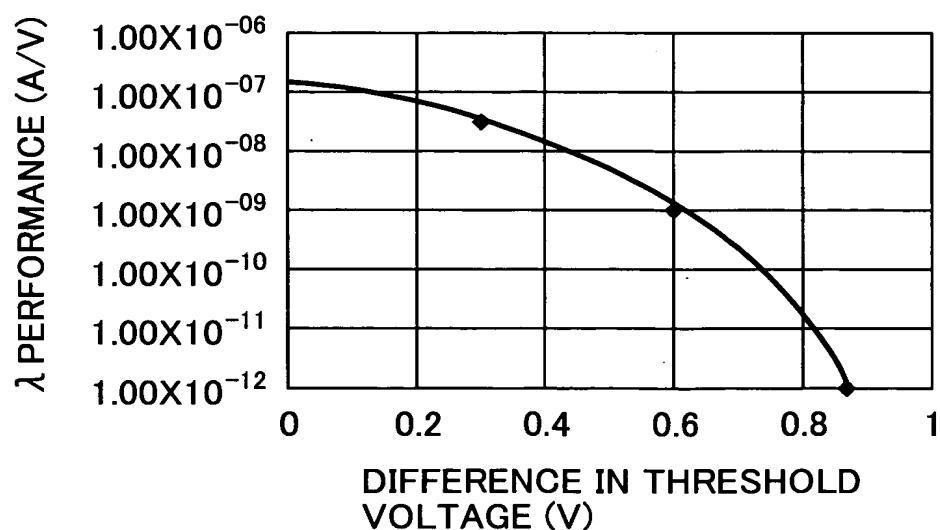


FIG. 4A

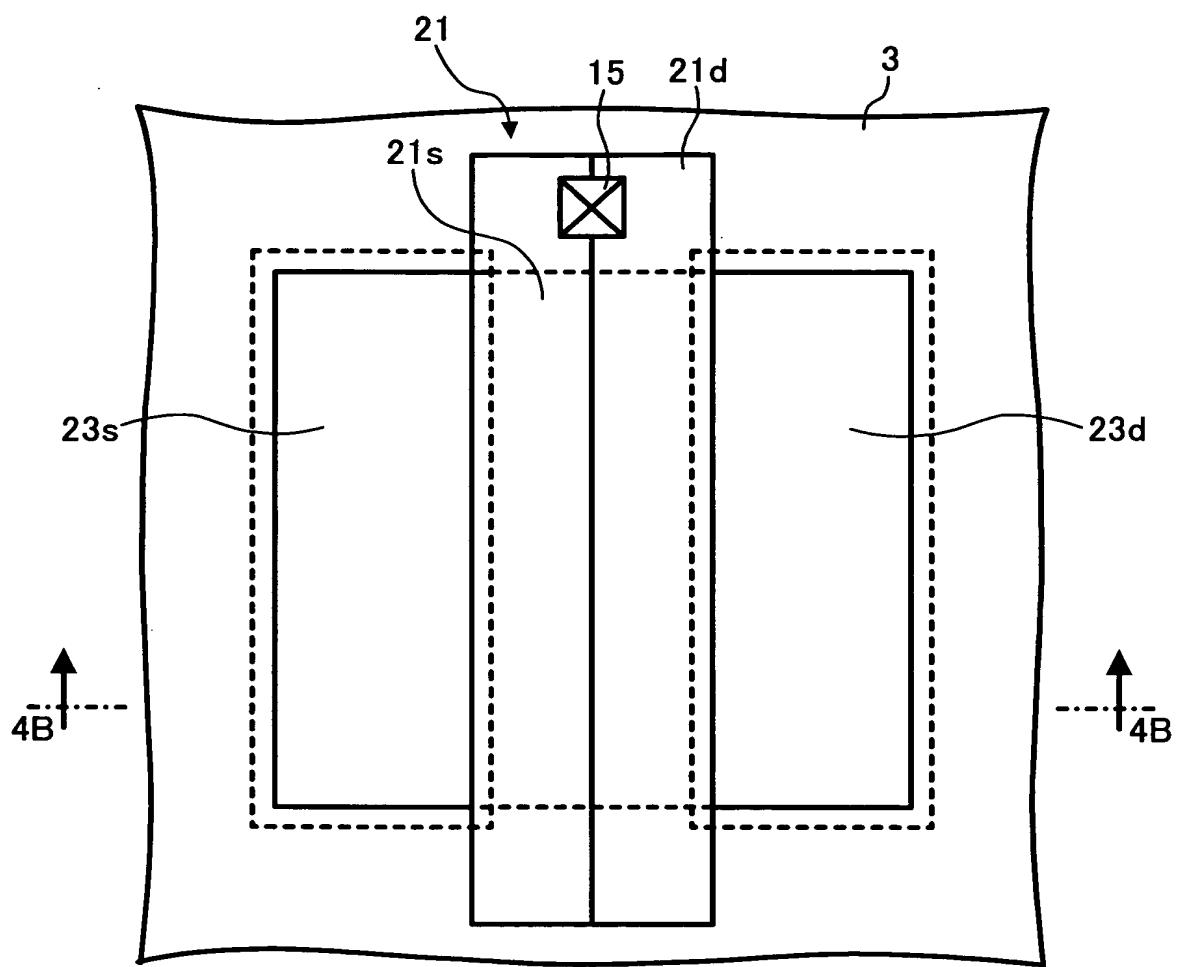


FIG. 4B

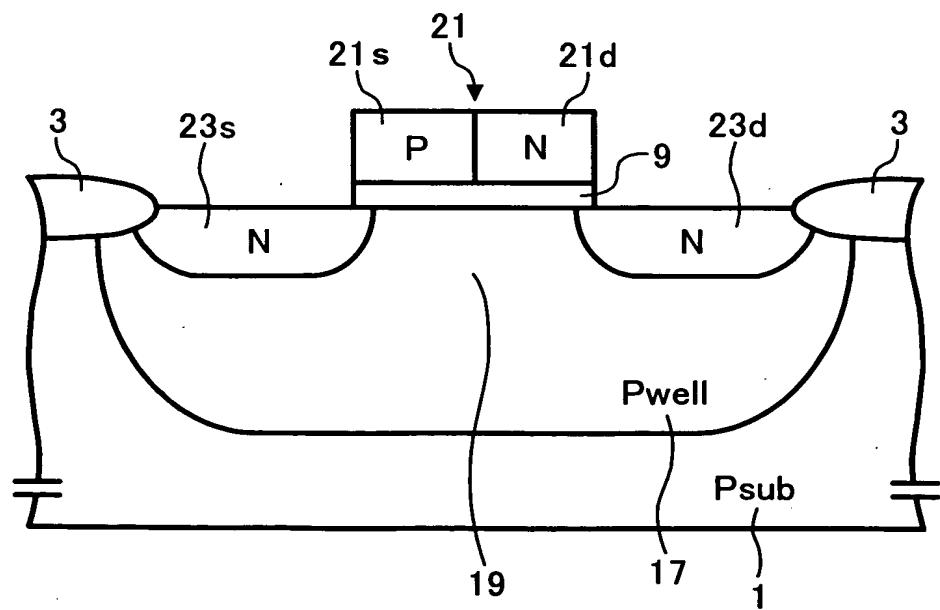


FIG. 5A

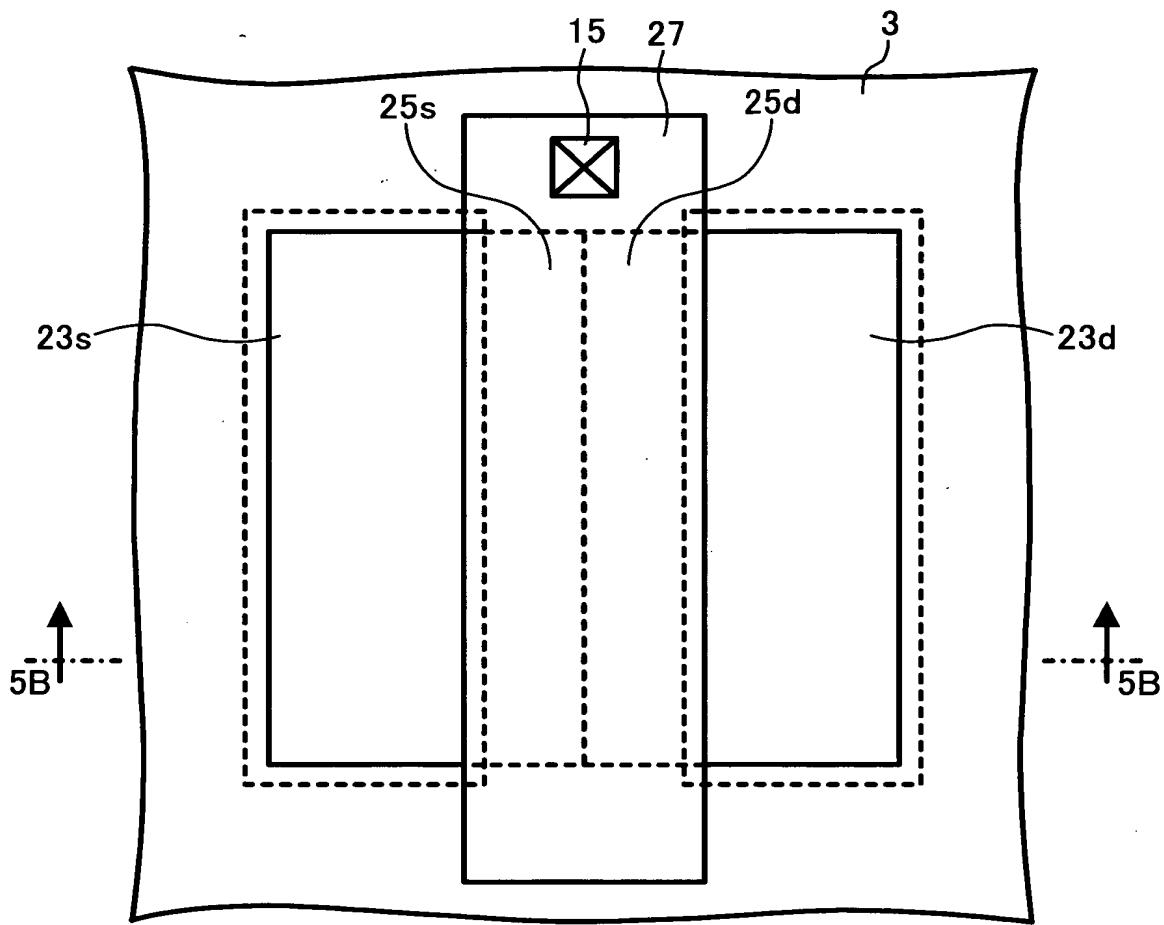


FIG. 5B

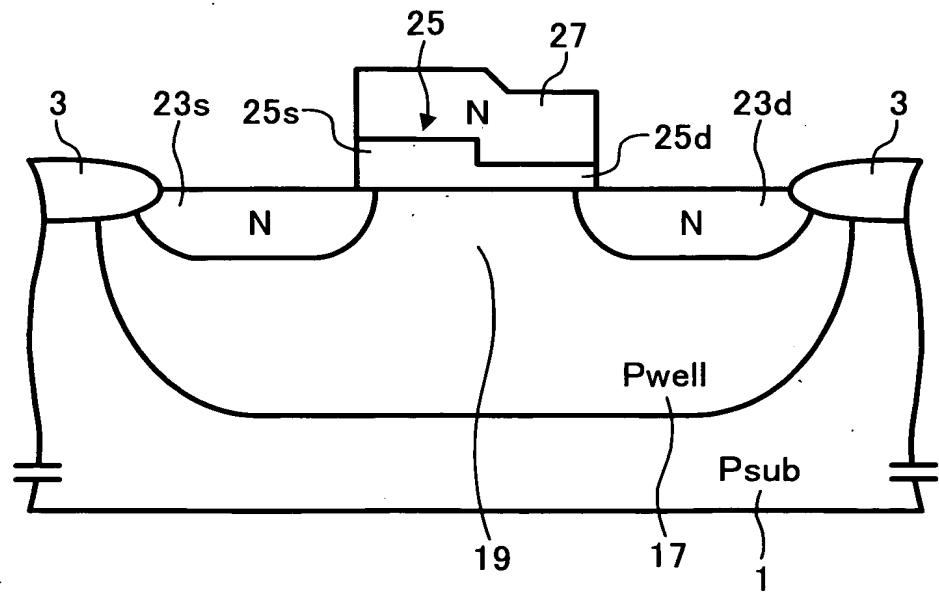


FIG. 6A

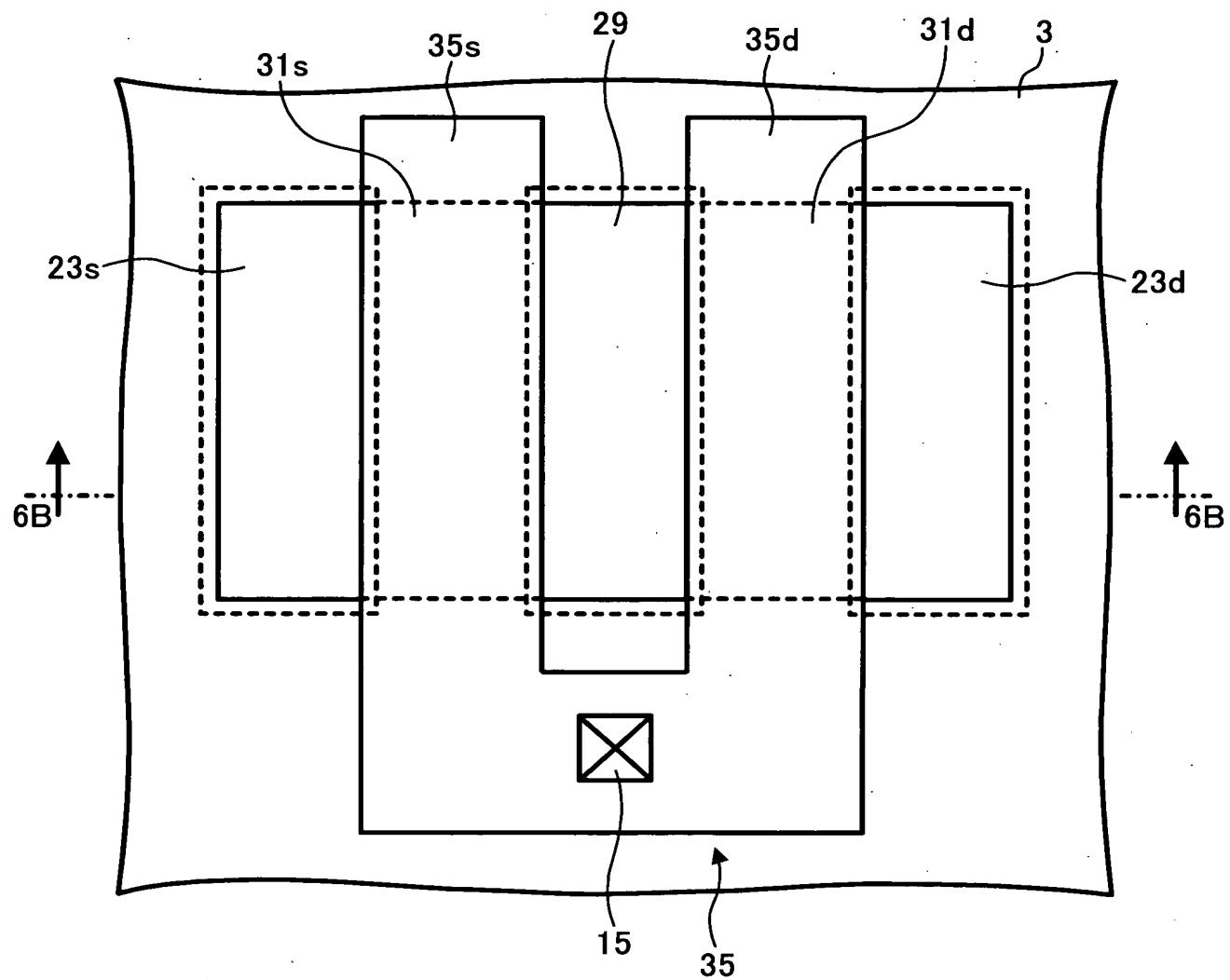


FIG. 6B

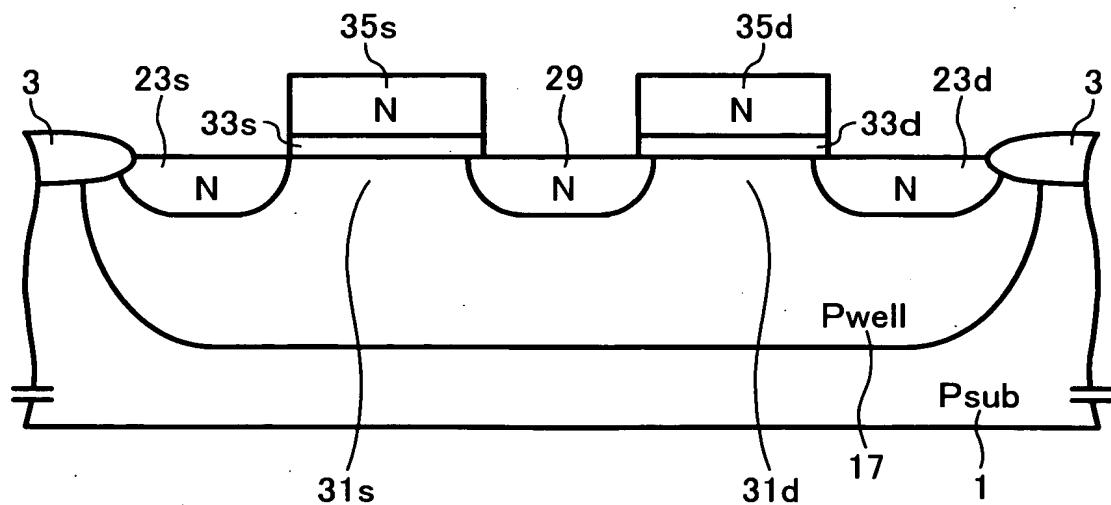


FIG. 7A

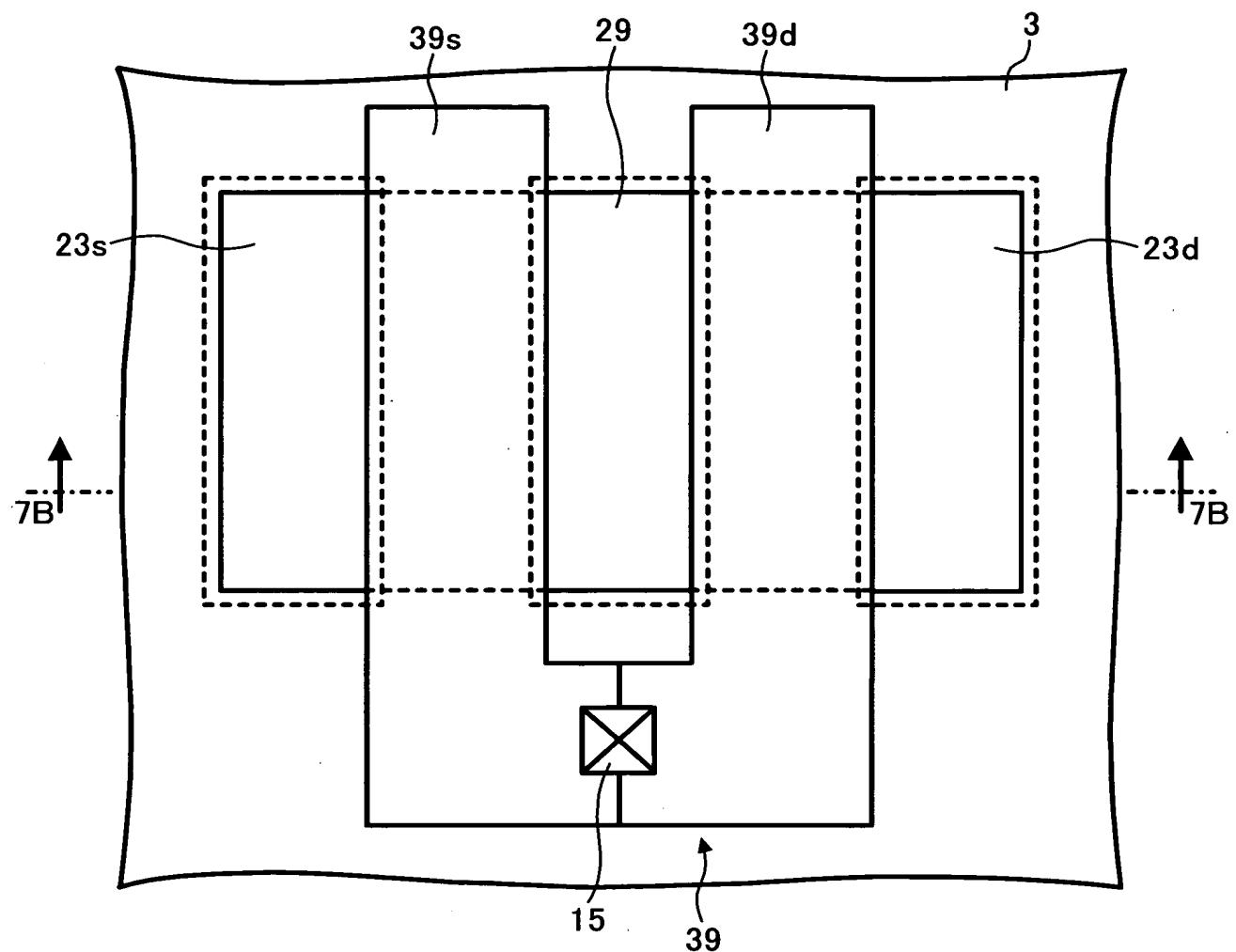


FIG. 7B

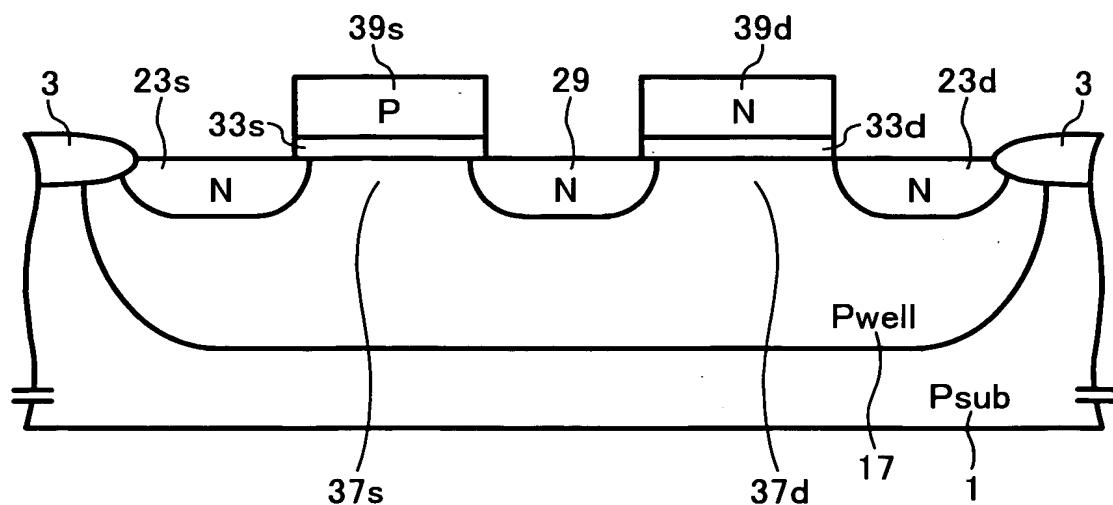


FIG. 8A

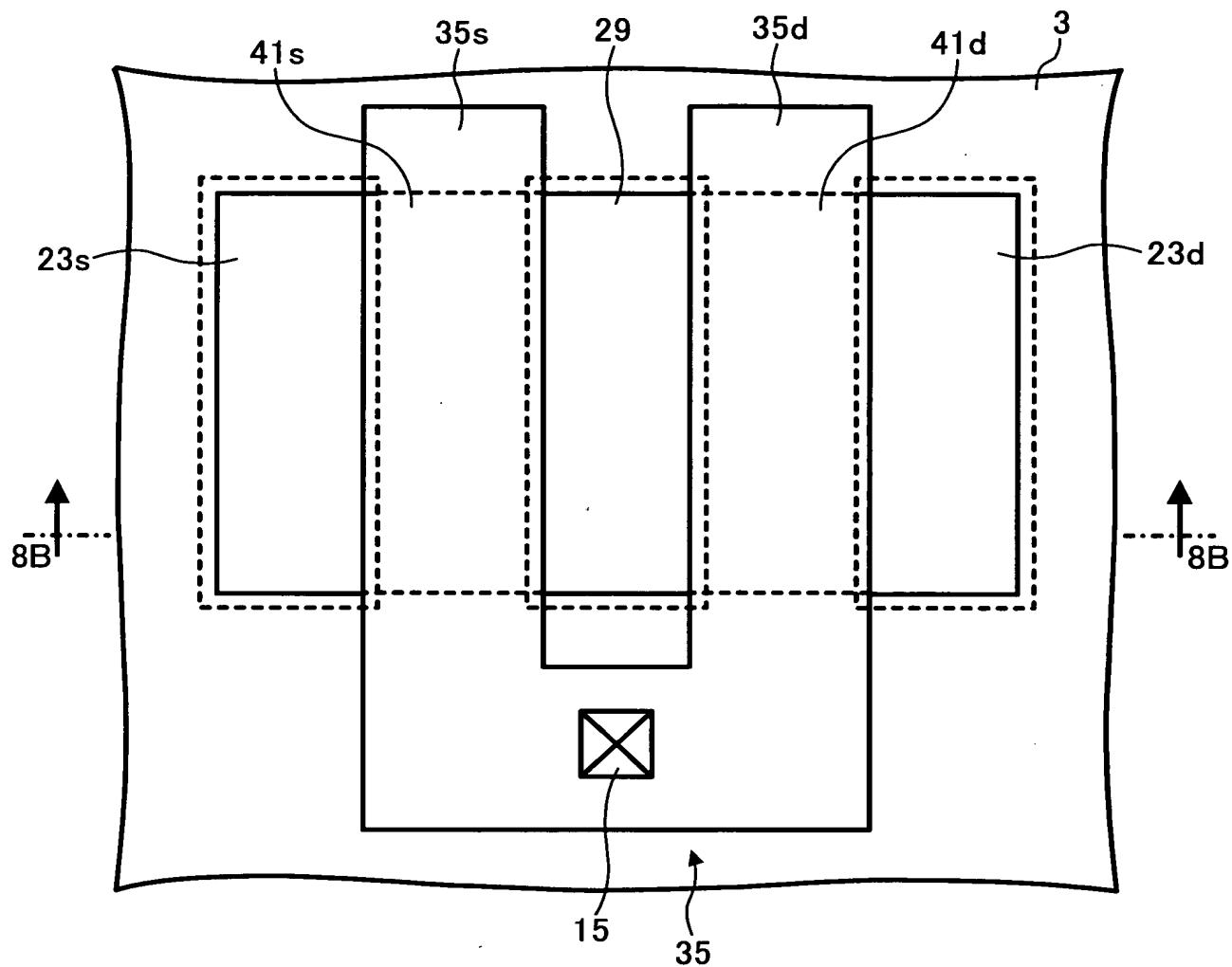


FIG. 8B

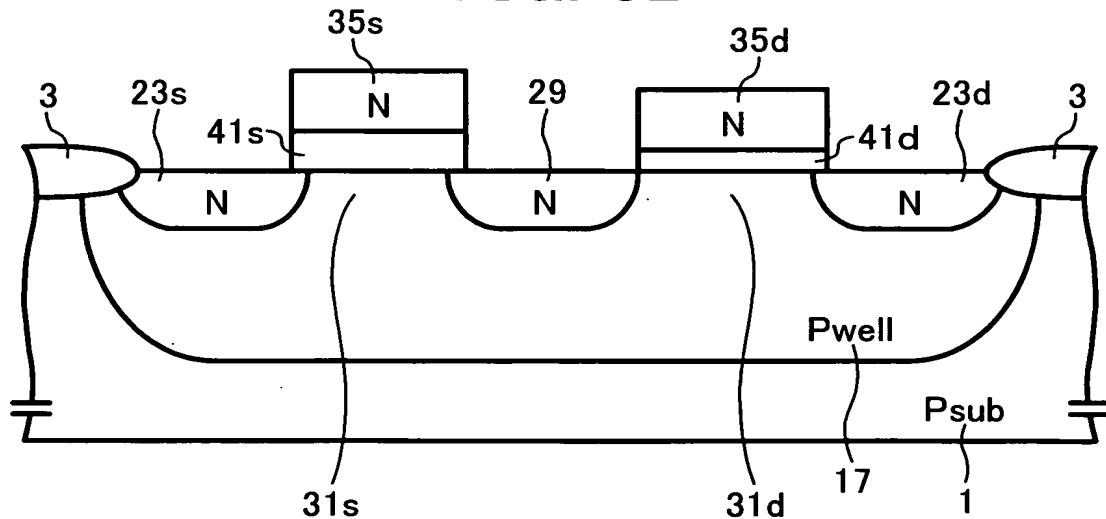


FIG. 9

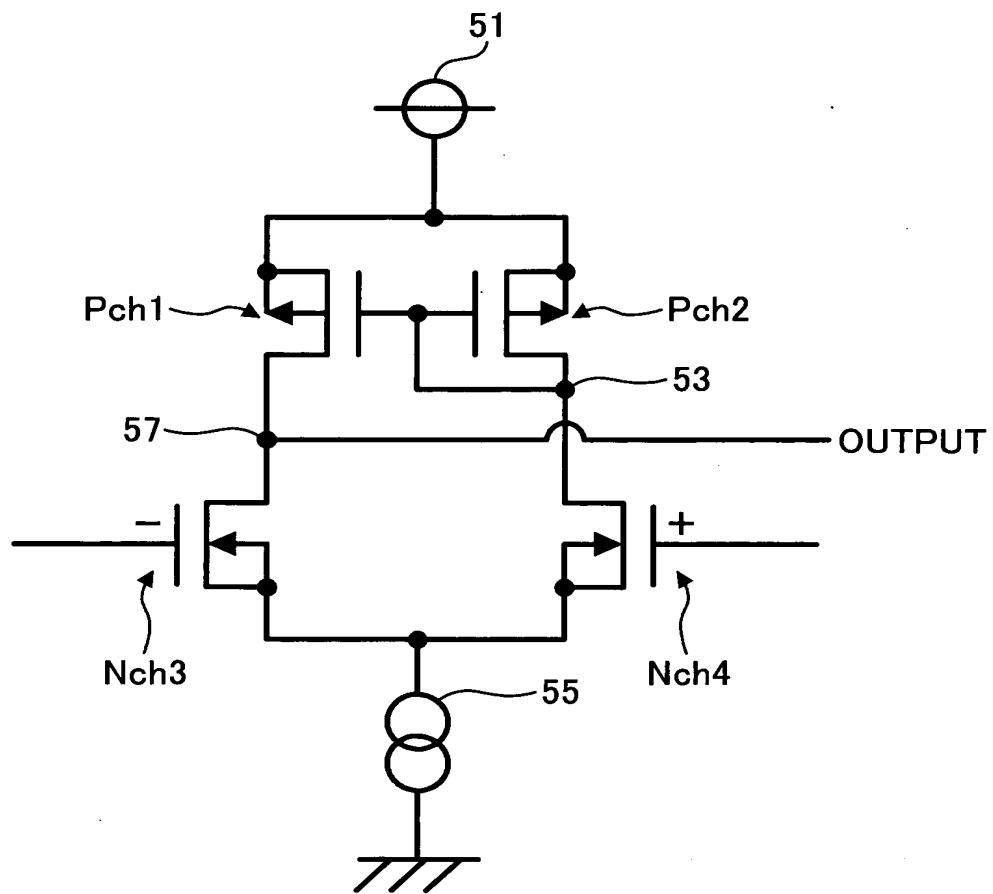


FIG. 10

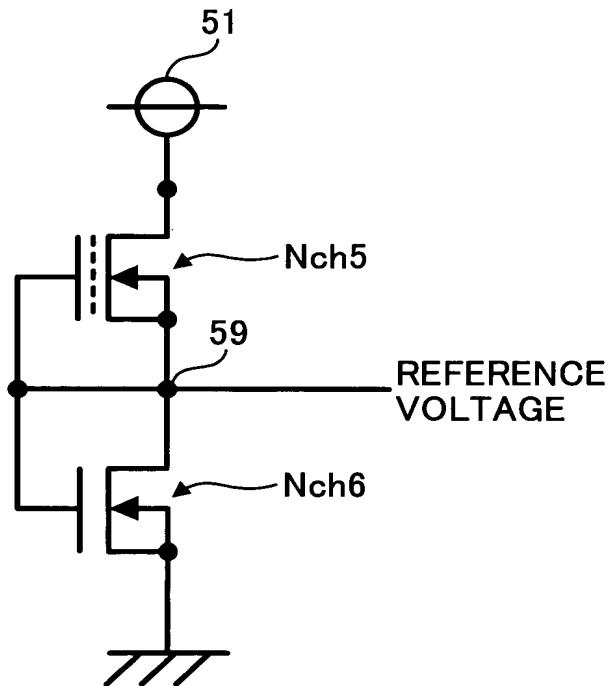


FIG.11

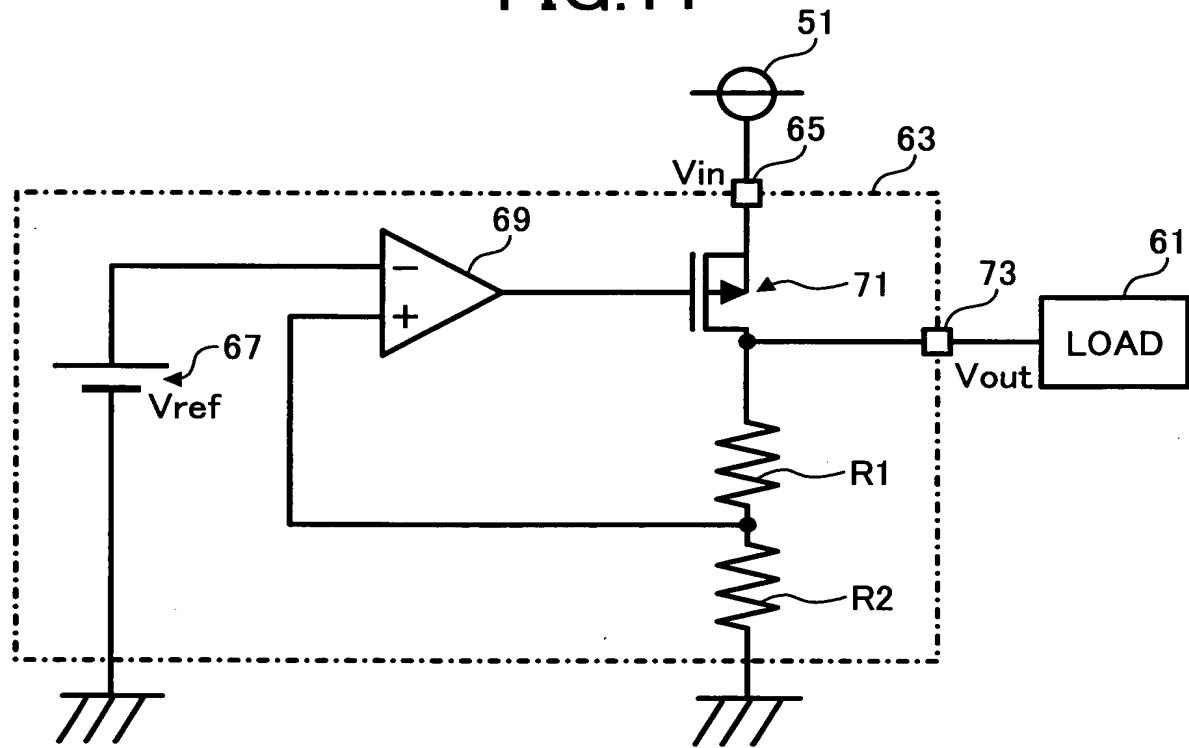


FIG. 12

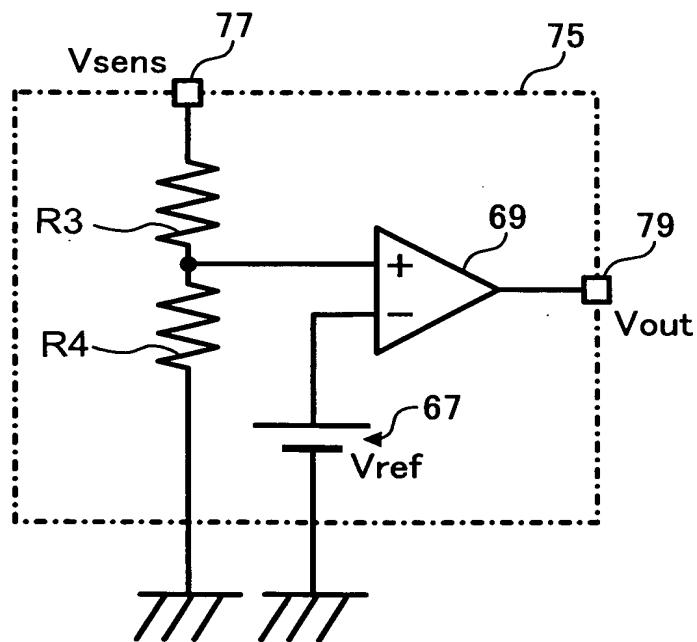


FIG.13A

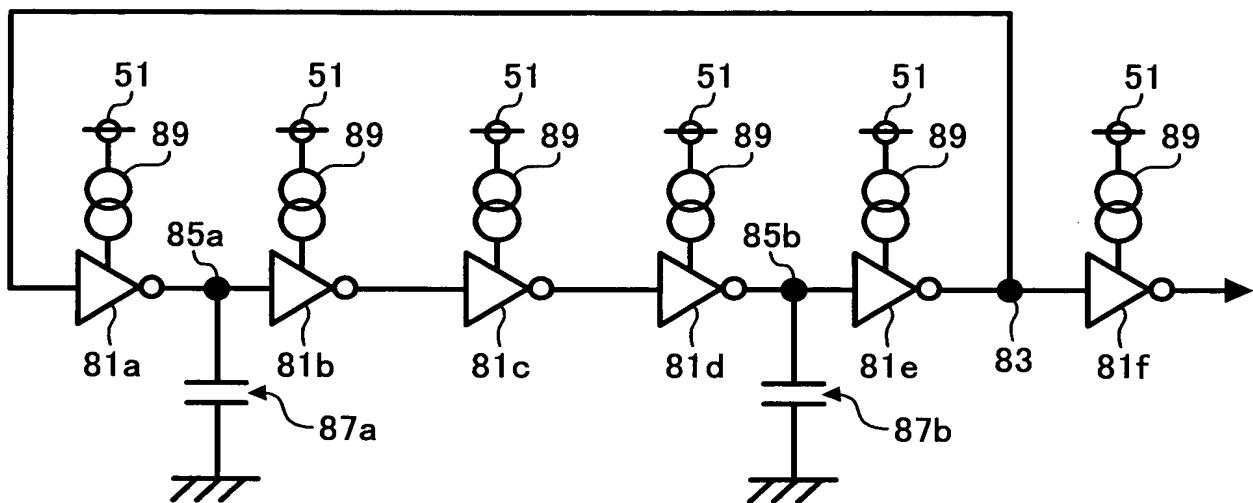
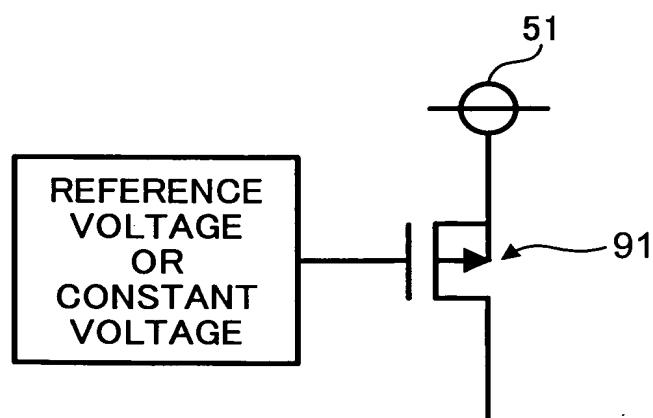


FIG. 13B



## FIG.14

TABLE 1

	SOURCE SIDE V <sub>th</sub> -0.65V	DRAIN SIDE V <sub>th</sub> -0.35V	DRAIN SIDE V <sub>th</sub> +0.20V	λ PERFORMANCE (A/V)
COMPARATIVE EXAMPLE 1	2.0 $\mu$ m	NOTHING	NOTHING	157 $\times 10^{-9}$
COMPARATIVE EXAMPLE 2	10.0 $\mu$ m	NOTHING	NOTHING	35.4 $\times 10^{-9}$
PRACTICAL EXAMPLE 1	2.0 $\mu$ m	2.0 $\mu$ m	NOTHING	9.93 $\times 10^{-9}$
PRACTICAL EXAMPLE 2	2.0 $\mu$ m	10.0 $\mu$ m	NOTHING	33.2 $\times 10^{-9}$
PRACTICAL EXAMPLE 3	2.0 $\mu$ m	NOTHING	10.0 $\mu$ m	0 (NO CHANGE)

FIG. 15

TABLE 2

	GATE ELECTRODE SOURCE SIDE (P TYPE)	DRAIN SIDE (N TYPE)	$\lambda$ PERFORMANCE (A/V)	$\beta$ PERFORMANCE ( $\mu$ A/V <sup>2</sup> )
COMPARATIVE EXAMPLE	50 $\mu$ m	NOTHING	$3.80 \times 10^{-9}$	27.6
PRACTICAL EXAMPLE 1	10 $\mu$ m	40 $\mu$ m	$3.03 \times 10^{-10}$	145.0
PRACTICAL EXAMPLE 2	20 $\mu$ m	30 $\mu$ m	$9.61 \times 10^{-11}$	69.2
PRACTICAL EXAMPLE 3	30 $\mu$ m	20 $\mu$ m	0 (NO CHANGE)	44.9
PRACTICAL EXAMPLE 4	40 $\mu$ m	10 $\mu$ m	0 (NO CHANGE)	33.1